AMENDMENT TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-38. (Canceled)

39. (Currently amended) A superconducting ceramic of the general formula
~~$(A_{1-x}B_x)_yCu_zO_w \cdot (A_{1-x'}B'_{x'})_{y'}Cu_{z'}O_{w'}$~~ $0.5[(Yb_{1-x}B_x)_yCu_zO_w \cdot (Yb_{1-x'}B'_{x'})_{y'}Cu_{z'}O_{w'}]$,
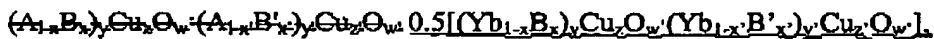
in which $0.1 \leq x < 1$

$0.1 \leq x' < 1$

$y = 2.5\text{-}3.5$,

$y' = 2.5\text{-}3.5$,

$z = 1.5\text{-}3.5$,

$z' = 1.5\text{-}3.5$,

$w = 6.0\text{-}8.0$,

$w' = 6.0\text{-}8.0$,

~~wherein A is one rare earth element, and~~

~~each of B and B' is one or more alkaline earth elements,~~

wherein A ~~includes Yb,~~

B is at least one alkaline earth element and includes Ba and

B' is at least one alkaline earth element and includes Sr.

40. (Currently amended) A superconducting ceramic of the general formula
~~$(A_{1-x}B_x)_yCu_zO_w \cdot (A_{1-x'}B'_{x'})_{y'}Cu_{z'}O_{w'}$~~ $0.5[(Yb_{1-x}B_x)_yCu_zO_w \cdot (Yb_{1-x'}B'_{x'})_{y'}Cu_{z'}O_{w'}]$,

in which $0.1 \leq x < 1$

$0.1 \leq x' < 1$

$y = 2.5\text{-}3.5$,

$y' = 2.5\text{-}3.5$,

$z = 1.5\text{-}3.5$,

$z' = 1.5\text{-}3.5$,

$w = 6.0\text{-}8.0$,

$w' = 6.0\text{-}8.0$,

~~wherein A is one rare earth element, and~~

  ~~each of B and B' is one or more alkaline-earth elements,~~

~~wherein A includes Yb,~~

  B is at least one alkaline earth element and includes Ba and

  B' is at least one alkaline earth element and includes Sr and Ca.

41.   (Currently amended) A superconducting ceramic of the general formula

~~$(A_{1-x}B_x)_y Cu_z O_w \cdot (A_{1-x}B'_{x'})_{y'} Cu_z O_{w'}$~~ $0.5[(Y_{1-x}Yb_{1-x}B_x)_y Cu_z O_w \cdot (Y_{1-x'}Yb_{1-x'}B'_{x'})_{y'} Cu_z O_{w'}]$,

  in which $0.1 \leq x < 1$

  $0.1 \leq x' < 1$

  $y = 2.5\text{-}3.5,$

  $y' = 2.5\text{-}3.5,$

  $z = 1.5\text{-}3.5,$

  $z' = 1.5\text{-}3.5,$

  $w = 6.0\text{-}8.0,$

  $w' = 6.0\text{-}8.0,$

~~wherein A is one rare earth element, and~~

  ~~each of B and B' is one or more alkaline earth elements,~~

~~wherein A includes Y and Yb,~~

  B is at least one alkaline earth element and includes Ba and

  B' is at least one alkaline earth element and includes Sr.

42.   (Currently amended) A superconducting ceramic of the general formula

~~$(A_{1-x}B_x)_y Cu_z O_w \cdot (A_{1-x}B'_{x'})_{y'} Cu_z O_{w'}$~~ $0.5[(Y_{1-x}Yb_{1-x}B_x)_y Cu_z O_w \cdot (Y_{1-x'}Yb_{1-x'}B'_{x'})_{y'} Cu_z O_{w'}]$,

  in which $0.1 \leq x < 1$

  $0.1 \leq x' < 1$

  $y = 2.5\text{-}3.5,$

  $y' = 2.5\text{-}3.5,$

  $z = 1.5\text{-}3.5,$

  $z' = 1.5\text{-}3.5,$

  $w = 6.0\text{-}8.0,$

  $w' = 6.0\text{-}8.0,$

~~wherein A is one rare earth element, and~~

~~each of B and B' is one or more alkaline earth elements,~~

wherein A ~~includes Y and Yb,~~

B is at least one alkaline earth element and includes Ba and

B' is at least one alkaline earth element and includes Ca.

43 - 44. (Canceled)

45.   (Previously presented) A superconducting ceramic having the stoichiometric formula $YbBaSrCu_3O_{6-8}$.

46.   (Previously presented) A superconducting ceramic having the stoichiometric formula $YbBa_{0.7}Sr_{0.7}Ca_{0.6}Cu_3O_{6-8}$.

47.   (Previously presented) A superconducting ceramic having the stoichiometric formula $Y_{0.5}Yb_{0.5}BaSrCu_3O_{6-8}$.

48.   (Previously presented) A superconducting ceramic having the stoichiometric formula $Y_{0.5}Yb_{0.5}BaCaCu_3O_{6-8}$.

49.   (Canceled)

50.   (Canceled)